PRODUCT SPECIFICATION

CMC Radiating Coaxial Cable

CMC 50D-78

PRODUCT DESCRIPTION

- The cable is used as a distributed antenna to provide communications in tunnels, subway mines, large building complexes, and any other application in confined areas.
- Slots in the copper outer conductor allow a controlled portion of the internal RF energy to be radiated into the surrounding environment and can be designed individually.
- With the broadband capability of 75~3000MHz, this cable is used for both one-way and two-way communication systems, and a single radiating cable can handle multiple communication systems simultaneously.

CONSTRUCTION

Inner conductor	Smooth copper tube	Φ 8.70mm
Insulation	Physically foamed PE	Φ22.50mm
Outer conductor	Corrugated copper tube with double row milled slots	Φ 24.90mm
Jacket	Non-halogenated, fire retardant PE	Φ 27.30mm

MECHANICAL PROPERTIES

Minimum bending radius	mm	140
Tensile force	N	1500

ELECTRICAL PROPERTIES

Impedance	Ω	50±2
Capacitance	pF/m	75
Propagation velocity	%	88
DC breakdown voltage	kV	10
Insulation resistance	MΩ•km	>10000

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TRANSMISSION PROPERTIES

Frequency	Nom. attenuation	Coupling loss(50%/95%)
MHz	@20℃,dB/100m	@20℃,dB
150	1.80	65 / 77
450	3.30	72 / 84
900	5.00	72 / 84
1800	8.70	68 / 80
1900	9.00	68 / 80
2200	9.70	68 / 81
2400	10.10	68 / 80

Attenuation & Coupling loss test method : IEC 61196-4.

VSWR

Tested in customers' operating band	≤1.3

ENVIRONMENTAL PROPERTIES

Recommended storage temperature	℃	-70~+85
Recommended installation temperature	℃	-25~+60
Recommended operating temperature	℃	-40~+85